UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:	)	
	)	
Coulton Chemical Corporation, Inc.	)	**NOTICE OF VIOLATION**
Coulton Chemical Company, L.P.	)	
Oregon, Ohio	)	**EPA-5-99-OH-36**
	)	
Proceedings Pursuant to	)	
Section 113(a)(1) of the	)	
Clean Air Act,	)	
42 U.S.C. § 7413(a)(1)	)	
	)	

NOTICE OF VIOLATION

The Administrator of the United States Environmental Protection Agency ("U.S. EPA"), by authority duly delegated to the undersigned, is issuing this Notice of Violation pursuant to Section 113(a)(1) of the Clean Air Act. U.S. EPA hereby notifies the State of Ohio, and Coulton Chemical Corporation, Inc. and Coulton Chemical Company, L.P., (collectively and individually - as appropriate - referred to as "Coulton") that U.S. EPA finds that Coulton, formerly located at 1400 Otter Creek Road, Oregon, Ohio, violated the Ohio State Implementation Plan ("SIP"), as follows:

Statutory and Regulatory Background

1. Pursuant to Section 109 of the Act, 42 U.S.C. § 7409, Congress established the authority of the U.S. EPA to promulgate primary and secondary National Ambient Air Quality Standards ("NAAQS") for those air pollutants the emissions of which cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare.

2. On September 14, 1973, the U.S. EPA promulgated primary and secondary NAAQS for sulfur dioxide. 38 FR 25681.

3. Pursuant to Section 107 of the Act, 42 U.S.C. § 7407, the U.S. EPA has the authority to designate the attainment status of an air quality control region, or any portion thereof, as nonattainment, attainment, or unclassifiable.

4. The U.S. EPA designated that portion of Lucas County, Ohio, that is east of U.S. Route 23 and west of the eastern

boundary of Oregon Township to be a nonattainment area for the primary sulfur dioxide NAAQS. 40 C.F.R. § 81.336, Subpart C.

5. Section 171(3) of the Act, 42 U.S.C. § 7501, provides:

> The term "lowest achievable emission rate" means for any source, that rate of emissions which reflects-
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> (A) the most stringent emission limitation which is contained in the implementation plan of any State for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable, or
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> (B) the most stringent emission limitation which is achieved in practice by such class or category of source, whichever is more stringent.
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> In no event shall the application of this term permit a proposed new or modified source to emit any pollutant in excess of the amount allowable under any applicable new source standards of performance.[1]

6. On September 18, 1974, the U.S. EPA promulgated 40 C.F.R. § 52.23. 40 C.F.R. § 52.23 provides, in relevant part, that the failure to comply with any promulgated regulations for the review of new or modified stationary or indirect sources shall render the person so failing subject to enforcement action under section 113 of the Act. 39 FR 33512 as amended at 54 FR 27285.

7. Pursuant to Sections 172, 173, 182 and 189 of the Act, 42 U.S.C. §§ 7502, 7503, 7511a, and 7513a, Congress legislated the implementation plan and permitting requirements for nonattainment areas of any air pollutant for which the U.S. EPA had promulgated a primary or secondary NAAQS. For sources located in nonattainment areas, Section 173(a) of the Act, 42 U.S.C. § 7503(a), specifically required that permits to construct or operate include offset emissions reductions and require that a proposed source comply with the lowest achievable emission rate (LAER).

8. On April 15, 1974, the U.S. EPA promulgated 40 C.F.R. § 52.1879, and revised that section on various dates including September 21, 1994, January 19, 1995, and July 13, 1995. In 40 C.F.R. § 52.1879(a), the U.S. EPA stated:

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[1] Also known as new source performance standards ("NSPS").

> The requirements of section 172, 173, 182, and 189 for permitting of major new sources and major modifications in nonattainment areas for ... sulfur dioxide ... are not met, because Ohio's regulations exempt source categories which may not be exempted and because the State has not adopted the new permitting requirements of the Clean Air Act Amendments of 1990 in a clear or enforceable manner.

9. On July 2, 1979, the U.S. EPA promulgated 40 C.F.R. § 52.24 and has revised 40 C.F.R. § 52.24 on numerous occasions since the original promulgation. 40 C.F.R. § 52.24(a) provides:

> After June 30, 1979, no major stationary source shall be constructed or modified in any nonattainment area as designated in 40 C.F.R. part 81, Subpart C (nonattainment area) to which any State implementation plan applies, if the emissions from suy [sic] will cause or contribute to concentrations of any pollutant for which a national ambient air quality standard is exceeded in such area, unless, as of the time of application for a permit for such construction, such plan meets the requirements of Part D, Title I, of the Clean Air Act, as amended (42 U.S.C. 7501 et seq.) (Part D). This section shall not apply to any nonattainment area once EPA has fully approved the State implementation plan for the area as meeting the requirements of Part D.

10. 40 C.F.R. § 52.24(d) provides:

> The restrictions of paragraphs (a) and (b) [§ 52.24(a) and (b)] apply only to major stationary sources of emissions that cause or contribute to concentrations of the pollutant for which the nonattainment area was designated as nonattainment, and for which the SIP does not meet the requirements of Part D or is not being carried out in accordance with the requirements of Part D.

11. 40 C.F.R. Part 51, Appendix S, sets forth U.S. EPA's Interpretive Ruling of the nonattainment area New Source Review requirements of Part D of the Act. 40 C.F.R. Part 51, Appendix S, Section IV.A.E. Appendix S allows a major source to construct a major modification in a nonattainment areas only if the following conditions are met:

1). That the modified source meets an emission limit defined as LAER;

2). Intrapollutant emission reductions (offsets) from existing sources in the same area as the proposed source (whether or not under the same ownership) are required such that there will be reasonable progress toward attainment of the applicable NAAQS (i.e., that emissions from the source are offset by a reduction of more than equivalent emissions of the same pollutant);

3). That the owner or operator of the proposed modified source demonstrates that all major stationary sources owned and operated by such person (or by any entity controlling, controlled by, or under common control with such person), in the same State as the proposed source, are in full compliance with emission limitations applicable under the Act (or are in compliance with an expeditious schedule which is Federally enforceable or contained in a Consent Decree); and

4). That the emissions offsets produce a positive net air quality benefit in the affected area.

Factual Background

12. Coulton was the owner and operator of two sulfuric acid production units [Ohio Environmental Protection Agency (Ohio EPA) source numbers 0448020014 P001 and 0448020014 P002, hereinafter Plant A and Plant B, respectively] located at 1400 Otter Creek Road, Oregon, Lucas County, Ohio. In October 1996, Coulton sold Plants A and B to Marsulex, Inc. (Marsulex).

Summary of New Source Review Applicability Analysis

13. All documents cited in this Notice are dated after June 30, 1979. The documents include: the report for a December 16, 1991, stack test; the August 14, 1992, Permits to Operate (PTOs) for Plants A and B; the July 1, 1994, Permit to Install (PTI) Application; the March 8, 1995, PTI; and the report for a November 29 and 30, 1995, stack test. Therefore, the U.S. EPA concludes that all events relevant to this Notice occurred after June 30, 1979.

14. On December 16, 1991, Coulton conducted a stack test at Plants A and B using Reference Method 8 in 40 C.F.R. Part

60, Appendix A (Method 8). For Plant A, the average emission rate from three test runs was 46.89 pounds of sulfur dioxide per hour. With a permitted operating time of 8,760 hours per year, the actual emissions are 205.4 tons of sulfur dioxide per year. For Plant B, the average emission rate from three test runs was 41.94 pounds of sulfur dioxide per hour. With a permitted operating time of 8,760 hours per year, the actual emissions are 183.7 tons of sulfur dioxide per year. Thus, prior to the physical changes to Plants A and B, they had total actual emissions, as defined in 40 C.F.R. § 52.24(f)(13), of 389.1 tons of sulfur dioxide per year. Therefore, the U.S. EPA concludes that Plants A and B are a major stationary source, as defined in 40 C.F.R. § 52.24(f)(1), (2), and (4)(i). Further, the U.S. EPA concludes that Coulton was the owner or operator of a major stationary source.

15. 40 C.F.R. § 81.336 (codified within Part 81, Subpart C) includes the following designated area in Lucas County, Ohio, that does not meet the Primary National Ambient Air Quality Standard for sulfur dioxide: The area east of [U.S.] Rte. 23 [and] west of the eastern boundary of Oregon Township. Plants A and B are located at 1400 Otter Creek Road, Oregon, Ohio. Oregon, Ohio, is located entirely within this designated area. Therefore, the U.S. EPA concludes that Plants A and B are located in a sulfur dioxide nonattainment area as designated in 40 C.F.R. Part 81, Subpart C.

16. On July 1, 1994, Coulton submitted an application for a Permit to Install ("PTI") to the Toledo Environmental Services Division ("Toledo ESD"). On March 8, 1995, the Ohio EPA issued a PTI to Coulton. On June 19, 1998, Marsulex provided to the U.S. EPA a list of the physical changes or changes in the method of operation that Coulton made to Plants A and B pursuant to the March 1995 PTI. The physical changes or changes in the method of operation included the following: Replaced absorption tower packing; renozzled main blower steam turbines; installed "dry fans"; installed additional cooling tower; installed acid cooler; installed additional catalyst; installed oxygen feed system. Therefore, the U.S. EPA concludes that Coulton did make physical changes or changes in the method of operation to Plants A and B.

17. Based upon the relevant definitions in 40 C.F.R. § 52.24(f)(1), (3), (11), (13) the net emissions increase is the difference between the future potential to emit and the

past actual emissions.

To calculate the future potential to emit, the U.S. EPA presumes that the actual emissions are equivalent to the allowable emissions from an emissions unit. The U.S. EPA calculates the future allowable emissions from the maximum production rate in the permit application and the most stringent emissions limit from the standard in the applicable standard in 40 C.F.R. Part 60 or 61, the State Implementation Plan, or a federally enforceable permit condition. The maximum production rate for Plant A in the PTI application is 221,483 tons of sulfuric acid per year; for Plant B 135,803 tons of sulfuric acid per year.

To calculate the past actual emissions, the U.S. EPA relies upon the results of stack tests or other reliable emission data. In December 1991, Coulton conducted a sulfur oxides emission test at Plants A and B using 40 C.F.R. 60, Appendix A, Reference Method 8. For Plant A, Coulton's testing contractor measured an average emission rate of 46.89 pounds of sulfur dioxide per hour; for Plant B an average emission rate of 41.94 pounds of sulfur dioxide per hour. Neither Plant A nor Plant B is subject to a restriction on the number of operating hours per year. Thus, each Plant is permitted to operate 8,760 hours per year.

18. Plants A and B were and are subject to an emission limit of 6.50 pounds of sulfur dioxide per ton of sulfuric acid produced (lbs/ton) in the Ohio State Implementation Plan. 40 C.F.R. § 52.1881(b)(21)(vi). Thus, the U.S. EPA made the following net emission increase calculations:

Plant A:	719.8 tons SO_2 per year	Future potential to emit
	-205.4 tons SO_2 per year	Past actual emissions
	514.4 tons SO_2 per year	Net emissions increase
Plant B:	441.4 tons SO_2 per year	Future potential to emit
	-183.7 tons SO_2 per year	Past actual emissions
	257.7 tons SO_2 per year	Net emissions increase
TOTAL:	514.4 tons SO_2 per year	Plant A
	+257.7 tons SO_2 per year	Plant B
	772.1 tons of sulfur dioxide per year	

19. Based upon this calculation, the U.S. EPA concludes that the physical changes or changes in the method of operation resulted in a significant net emissions increase of sulfur dioxide, as defined in 40 C.F.R. § 52.24(10). The U.S. EPA

further concludes that the physical changes or changes in the method of operation were a major modification, as defined in 40 C.F.R. § 52.24(5)(i).

20. The reports for stack tests that Coulton conducted on December 16, 1991, and November 29 and 30, 1995, demonstrate that Plants A and B emit sulfur dioxide into the ambient atmosphere. The fact that Plants A and B emit sulfur dioxide into the ambient atmosphere means that those emissions cause or contribute to concentrations of sulfur dioxide in the ambient atmosphere.

21. 40 C.F.R. § 52.1879 (rev. July 1, 1995) states that the Ohio SIP does not meet the requirements of Part D of the Act. On July 1, 1994, Coulton submitted its application for a PTI for the modifications that are the subject of this Notice of Violation. Therefore, the U.S. EPA concludes that, as of the time of application for a permit for such construction or modification, the Ohio SIP did not meet the requirements of Part D of the Act.

22. The March 8, 1995, PTI (that the Ohio EPA issued based on Coulton's July 1, 1994, application) did not meet the Part D requirements as implemented by the Offset Policy (see Paragraph 11 above) and as specified below.

    1). The PTI required Coulton to employ the best achievable technology (BAT) per Ohio Administrative Code 3745-31-05(A)(3). The Toledo ESD and the Ohio EPA believed that BAT for a sulfuric acid plant is 6.5 pounds of sulfur dioxide per ton of sulfuric acid produced. The NSPS for sulfuric acid plants has a sulfur dioxide limit of 4 pounds of sulfur dioxide per ton of sulfuric acid produced. 40 C.F.R. § 60.82(a). Because the Toledo ESD's and Ohio EPA's BAT determination for Coulton is less stringent than the NSPS for Sulfuric Acid Plants, it is inherently less stringent than LAER.

    2). The PTI does not include intrapollutant emission reductions from existing sources in the same area as the proposed source. The PTI application and the PTI are completely silent on the subject.

    3). The PTI application and the PTI are completely silent on the compliance status of other facilities in the State of Ohio that Coulton owned and operated during the time of the application and review.

4). Because the PTI application and the PTI did not include any emissions offsets and because the physical changes or changes in the method of operation that Coulton made to Plants A and B resulted in a net emissions increase of actual emissions of 772.1 tons of sulfur dioxide per year, it is impossible for the PTI to have produced a positive net air quality benefit to the ambient air of Lucas County, Ohio.

Because the PTI did not meet any of the requirements of the Offset Policy, the U.S. EPA concludes that the March 8, 1995, PTI did not meet the nonattainment area requirements of Part D of the Act.

Failure to Obtain a Part D Construction Permit

23. Based on the above, the U.S. EPA finds that after June 30, 1979, Coulton constructed a major modification of a major stationary source of sulfur dioxide located in a sulfur dioxide nonattainment area as designated in 40 C.F.R. 81, Subpart C, without obtaining a construction permit that met the requirements of Part D of the Act as implemented by the Emission Offset Interpretive Ruling. The emissions of sulfur dioxide from Plant A and Plant B cause or contribute to concentrations of sulfur dioxide in an area in which the sulfur dioxide NAAQS is exceeded.

Failure to Obtain a PSD Permit Prior to Commencing Construction

24. The earliest purchase order for equipment related to the major modification of Plants A and B is dated May 27, 1994. On March 8, 1995, the Ohio EPA issued the PTI for the major modification. Therefore, the U.S. EPA concludes that Coulton commenced construction before the Ohio EPA issued the PTI on March 8, 1995. This action was a violation of 40 C.F.R. §§ 52.23 and 52.24.

Failure to Include Fugitive Emissions

25. The PTI application is silent on the subject of fugitive emissions, as defined in 40 C.F.R. § 52.24(f)(9), in the net emissions increase calculations. Therefore, the U.S. EPA concludes that Coulton did not include the fugitive emissions from the facility in the construction permit application in violation of 40 C.F.R. §§ 52.23 and 52.24.

NOTICE OF VIOLATION

The Administrator of the U.S. EPA, by authority duly delegated to the undersigned, hereby notifies you and the State of Ohio that Coulton violated of the 40 C.F.R. §§ 52.23 and 52.24 as set forth in this Notice of Violation.

Date: 8/18/99

Margaret M. Guerriero, Acting Director
Air and Radiation Division